



ICCS 2009 User Guide for the International Database Supplement 4

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Supplement 4



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Supplement 4:

ICCS 2009 Sampling Stratification Information

Overview

This supplement contains documentation on the explicit and implicit stratification variables included in the International Civic and Citizenship Education Study (ICCS) 2009 data files. The explicit strata are smaller sampling frames, created from the national sampling frames, from which national samples of schools were drawn. The implicit strata are nested within the explicit strata, and were used for sorting the sampling frame prior to the systematic sampling of the schools. For details of the ICCS 2009 sample design and implementation, please refer to the *ICCS 2009 Technical Report* (Schulz, Ainley, & Fraillon, forthcoming).

Stratification Variables

The explicit and implicit stratification variables are named IDSTRATE and IDSTRATI, respectively. Country-specific codes and labels are provided for each stratum. These codes and labels are presented in Table S4.1 for explicit strata and Table S4.2 for the implicit strata.

Notes and Considerations

The stratification variables contain information useful for secondary analyses. However, users are cautioned that stratification in some countries is very detailed, resulting in strata—either explicit or implicit—with sample sizes that may be too small to produce reliable estimates. Users should exercise caution when drawing conclusions based on estimates obtained from small strata.

Stratification codes are comparable only within but not across countries. For example, the characteristics of a “rural” school in Thailand may be very different from those of a “rural” school in Estonia. Therefore, stratification variables cannot be employed in international comparisons.

Stratification is based on information provided by each country in the school sampling frames. These sampling frames were provided well in advance of data collection, sometimes two years prior. Thus, the stratification information may no longer be appropriate, or available, when consulting more current sources, and differences in a sampled school’s status may occur.

In some countries, explicit or implicit stratification was used for school sample selection, but the NRC did not agree to the release of the stratification variables. If this was the case, the variables were set to “missing” in the ICCS 2009 data files.

Table S4.1 IDSTRATE (Explicit Stratification)

IDCNTRY	Country	IDSTRATE	Explicit Stratum
40	Austria	1	AHS - Unterstufe
		2	Hauptschule
		3	Other School Type
956	Belgium (Flemish)	1	Large
		2	Medium/Small
100	Bulgaria	1	Region 01
		2	Region 02
		3	Region 03
		4	Region 04
		5	Region 05
		6	Region 06
		7	Region 07
		8	Region 08
		9	Region 09
		10	Region 10
		11	Region 11
152	Chile	1	Municipal
		2	Private
		3	Subsidized
158	Chinese Taipei	1	North - Private
		2	North - Public
		3	Middle - Private
		4	Middle - Public
		5	South - Private
		6	South - Public
		7	East - Private
		8	East - Public
170	Colombia	1	Hemisphere A - Morning
		2	Hemisphere A - Afternoon
		3	Hemisphere A - Full Time
		4	Hemisphere B - Morning
		5	Hemisphere B - Afternoon
		6	Hemisphere B - Full Time
196	Cyprus	1	None
203	Czech Republic	1	Gymnázium
		2	Základní škola
208	Denmark	99	None
214	Dominican Republic	1	Public
		2	Private
926	England	1	None

IDCNTRY	Country	IDSTRATE	Explicit Stratum
233	Estonia	1	Estonian
		2	Russian
		3	Estonian and Russian*
246	Finland	1	Southern Finland - Rural
		2	Southern Finland - Semi-urban or Urban
		3	Western Finland - Rural
		4	Western Finland - Semi-urban or Urban
		5	Eastern Finland - Rural
		6	Eastern Finland - Semi-urban or Urban
		7	Northern Finland - Rural
		8	Northern Finland - Semi-urban or Urban
		9	Swedish Speaking - Rural
		10	Swedish Speaking - Semi-urban or Urban
300	Greece	1	Public - Athens Center and Piraeus Center
		2	Public - Athens North East and South East
		3	Public - Athens West
		4	Public - Thessaloniki
		5	Public - Very Large Towns
		6	Public - Large Towns
		7	Public - Small Towns
		8	Public - Rural Communities
		9	Private
320	Guatemala	1	Perf. Group 1
		2	Perf. Group 2
		3	Perf. Group 3
		4	Perf. Group 4
		5	Perf. unknown
344	Hong Kong SAR	1	Government
		2	Aided/Caput
		3	Direct Subsidy Scheme
360	Indonesia	1	None
372	Ireland	1	≤ 40 Students - Community/Comprehensive
		2	≤ 40 Students - Secondary
		3	≤ 40 Students - Vocational
		4	41-80 Students - Community/Comprehensive
		5	41-80 Students - Secondary
		6	41-80 Students - Vocational
		7	81-170 Students - Community/Comprehensive
		8	81-170 Students - Secondary
		9	81-170 Students - Vocational
		10	≥ 171 Students
380	Italy	1	None
410	Korea, Republic of	1	Capital Region
		2	Chungcheong Gangwon
		3	Honam Jeju
		4	Yeongnam

*All students in the four selected schools from that stratum (1148, 1149, 1150, 2147) were tested in Estonian language.

IDCNTRY	Country	IDSTRATE	Explicit Stratum
428	Latvia	1	Riga
		2	City
		3	Town
		4	Rural
438	Liechtenstein	1	None
440	Lithuania	1	Russian
		2	Polish
		3	Lithuanian - Vilnius (Capital)
		4	Lithuanian - Other Major Cities
		5	Lithuanian - Medium Size Cities
		6	Lithuanian - Small Cities
		7	Lithuanian - Other
442	Luxembourg	1	None
470	Malta	1	None
484	Mexico	1	General
		2	Particular (Private)
		3	Técnica (Technical)
		4	Telesecundaria (Telesecondary)
528	Netherlands	1	Vocational Education
		2	General Education
554	New Zealand	1	Very Large Schools
		2	All Other Schools
578	Norway	1	Bokmål
		2	Nynorsk
600	Paraguay	1	Urban - Public
		2	Urban - Private
		3	Urban - Op (subsidized)
		4	Rural - Public
		5	Rural - Private
		6	Rural - Op (subsidized)
616	Poland	1	Rural
		2	Small Town
		3	Medium Size Town
		4	Big City
643	Russian Federation	99	missing
703	Slovak Republic	1	Bratislava Region
		2	Trnava Region
		3	Trenčín Region
		4	Nitra Region
		5	Žilina Region
		6	Banská Bystrica Region
		7	Prešov Region
		8	Košice Region
705	Slovenia	1	None

IDCNTRY	Country	IDSTRATE	Explicit Stratum
724	Spain	1	Andalucía
		2	Aragón
		3	Asturias
		4	Balears (Illes)
		5	Canarias
		6	Cantabria
		7	Castilla y León
		8	Castilla-La Mancha
		9	Catalunya
		10	Ceuta y Melilla
		11	Com. Valenciana
		12	Extremadura
		13	Galicia
		14	Madrid
		15	Murcia
		16	Navarra
		17	País Vasco
		18	Rioja (La)
752	Sweden	1	Independent - $\geq 40\%$ Foreign Background
		2	Independent - $< 40\%$ Foreign Background
		3	Municipality - $\geq 40\%$ Foreign Background
		4	Municipality - $< 40\%$ Foreign Background
756	Switzerland	1	Bern, Fribourg, Waadt - German
		2	Bern, Fribourg, Waadt - French
		3	Other Cantons - German
		4	Other Cantons - French
		5	Other Cantons - Italian
764	Thailand	1	Middle - Private
		2	Middle - Public
		3	North - Private
		4	North - Public
		5	North East - Private
		6	North East - Public
		7	South - Private
		8	South - Public

Table S4.2 IDSTRATI (Implicit Stratification)

IDCNTRY	Country	IDSTRATI	Implicit Stratum
40	Austria	1	Burgenland
		2	Kärnten
		3	Niederösterreich
		4	Oberösterreich
		5	Salzburg
		6	Steiermark
		7	Tirol
		8	Vorarlberg
		9	Wien
		10	None
956	Belgium (Flemish)	1	Antwerpen - Public - A-Stream Only
		2	Antwerpen - Public - A- and BVL-Stream
		3	Antwerpen - Subsidized Private - A-Stream Only
		4	Antwerpen - Subsidized Private - A- and BVL-Stream
		5	Vlaams-Brabant and Brussel - Public - A-Stream Only
		6	Vlaams-Brabant and Brussel - Public - A- and BVL-Stream
		7	Vlaams-Brabant and Brussel - Subsidized Private - A-Stream Only
		8	Vlaams-Brabant and Brussel - Subsidized Private - A- and BVL-Stream
		9	Limburg - Public - A-Stream Only
		10	Limburg - Public - A- and BVL-Stream
		11	Limburg - Subsidized Private - A-Stream Only
		12	Limburg - Subsidized Private - A- and BVL-Stream
		13	Oost-Vlaanderen - Public - A-Stream Only
		14	Oost-Vlaanderen - Public - A- and BVL-Stream
		15	Oost-Vlaanderen - Subsidized Private - A-Stream Only
		16	Oost-Vlaanderen - Subsidized Private - A- and BVL-Stream
		17	West-Vlaanderen - Public - A-Stream Only
		18	West-Vlaanderen - Public - A- and BVL-Stream
		19	West-Vlaanderen - Subsidized Private - A-Stream Only
		20	West-Vlaanderen - Subsidized Private - A- and BVL-Stream
100	Bulgaria	1	General - Small Town (< 15,000)
		2	General - Medium Size Town (15,000 - 90,000)
		3	General - Large Town (> 90,000)
		4	Profiled
		5	Vocational
152	Chile	99	missing
158	Chinese Taipei	1	Rural
		2	Urban
170	Colombia	1	Public - Urban
		2	Public - Rural
		3	Public - Semi-urban
		4	Private - Urban
		5	Private - Rural

IDCNTRY	Country	IDSTRATI	Implicit Stratum
196	Cyprus	1	Nicosia - Urban
		2	Nicosia - Rural
		3	Limassol - Urban
		4	Limassol - Rural
		5	Larnaca-Famagusta - Urban
		6	Larnaca-Famagusta - Rural
		7	Paphos - Urban
		8	Paphos - Rural
203	Czech Republic	1	Hlavní město Praha
		2	Střední Čechy
		3	Jihočeský kraj
		4	Plzeňský kraj
		5	Karlovarský kraj
		6	Ústecký kraj
		7	Liberecký kraj
		8	Královéhradecký kraj
		9	Pardubický kraj
		10	Vysočina
		11	Jihomoravský kraj
		12	Olomoucký kraj
		13	Zlínský kraj
		14	Moravskoslezský kraj
208	Denmark	99	missing
214	Dominican Republic	1	Rural
		2	Urban

IDCNTRY	Country	IDSTRATI	Implicit Stratum
926	England	1	Lowest 20% - Comprehensive to 16
		2	Lowest 20% - Comprehensive to 18
		3	Lowest 20% - Independent
		4	Lowest 20% - Other Type
		5	2nd Lowest 20% - Comprehensive to 16
		6	2nd Lowest 20% - Comprehensive to 18
		7	2nd Lowest 20% - Independent
		8	2nd Lowest 20% - Other Type
		9	Middle 20% - Comprehensive to 16
		10	Middle 20% - Comprehensive to 18
		11	Middle 20% - Independent
		12	Middle 20% - Other Type
		13	2nd Highest 20% - Comprehensive to 16
		14	2nd Highest 20% - Comprehensive to 18
		15	2nd Highest 20% - Independent
		16	2nd Highest 20% - Other Type
		17	Highest 20% - Comprehensive to 16
		18	Highest 20% - Comprehensive to 18
		19	Highest 20% - Independent
		20	Highest 20% - Other Type
		21	Perf. Unknown - Comprehensive to 16
		22	Perf. Unknown - Comprehensive to 18
		23	Perf. Unknown - Independent
		24	Perf. Unknown - Other Type
233	Estonia	1	Urban
		2	Rural
246	Finland	1	None
300	Greece	1	Attica
		2	Stereia Ellada (Excluding Attica)
		3	Western Greece
		4	Peloponessos
		5	Ionian Islands
		6	Epirus
		7	Thessaly
		8	East Macedonia-Thrace
		9	Central Macedonia
		10	West Macedonia
		11	Aegean Islands
		12	Crete
320	Guatemala	1	Cooperative - Rural
		2	Cooperative - Urban
		3	Private - Rural
		4	Private - Urban
		5	Public - Rural
		6	Public - Urban

IDCNTRY	Country	IDSTRATI	Implicit Stratum
344	Hong Kong SAR	1	High Ability - Hong Kong Island
		2	High Ability - Kowloon
		3	High Ability - New Territories
		4	Middle Ability - Hong Kong Island
		5	Middle Ability - Kowloon
		6	Middle Ability - New Territories
		7	Low Ability - Hong Kong Island
		8	Low Ability - Kowloon
		9	Low Ability - New Territories
360	Indonesia	1	Junior High - Public - High Performance
		2	Junior High - Public - Medium Performance
		3	Junior High - Public - Low Performance
		4	Junior High - Private - High Performance
		5	Junior High - Private - Medium Performance
		6	Junior High - Private - Low Performance
		7	Islamic Junior High - Public - High Performance
		8	Islamic Junior High - Public - Medium Performance
		9	Islamic Junior High - Public - Low Performance
		10	Islamic Junior High - Private - High Performance
		11	Islamic Junior High - Private - Medium Performance
		12	Islamic Junior High - Private - Low Performance
372	Ireland	1	In Highest SES Quarter - 0% Female
		2	In Highest SES Quarter - 1-45% Female
		3	In Highest SES Quarter - 46-99% Female
		4	In Highest SES Quarter - 100% Female
		5	In Second Highest SES Quarter - 0% Female
		6	In Second Highest SES Quarter - 1-45% Female
		7	In Second Highest SES Quarter - 46-99% Female
		8	In Second Highest SES Quarter - 100% Female
		9	In Third Highest SES Quarter - 0% Female
		10	In Third Highest SES Quarter - 1-45% Female
		11	In Third Highest SES Quarter - 46-99% Female
		12	In Third Highest SES Quarter - 100% Female
		13	In Lowest SES Quarter - 0% Female
		14	In Lowest SES Quarter - 1-45% Female
		15	In Lowest SES Quarter - 46-99% Female
		16	In Lowest SES Quarter - 100% Female
		17	None
380	Italy	1	None
410	Korea, Republic of	1	Rural
		2	Urban
428	Latvia	1	Latvian - Basic
		2	Latvian - Secondary
		3	Russian - Basic
		4	Russian - Secondary
		5	Mixed - Basic
		6	Mixed - Secondary

IDCNTRY	Country	IDSTRATI	Implicit Stratum
438	Liechtenstein	1	None
440	Lithuania	1	Gymnasium
		2	Secondary
		3	Basic
		4	Other School Type
442	Luxembourg	1	None
470	Malta	1	State - Secondary
		2	State - Junior Lyceum
		3	Non-State
484	Mexico	1	None
528	Netherlands	1	None
554	New Zealand	1	Independent (Private) Schools
		2	State - Higher Socio-economic Disadvantage - Co-ed
		3	State - Higher Socio-economic Disadvantage - Boys
		4	State - Higher Socio-economic Disadvantage - Girls
		5	State - Moderate Socio-economic Disadvantage - Co-ed
		6	State - Moderate Socio-economic Disadvantage - Boys
		7	State - Moderate Socio-economic Disadvantage - Girls
		8	State - Lower Socio-economic Disadvantage - Co-ed
		9	State - Lower Socio-economic Disadvantage - Boys
		10	State - Lower Socio-economic Disadvantage - Girls
		11	None
578	Norway	1	None
600	Paraguay	1	None
616	Poland	1	None
643	Russian Federation	99	missing
703	Slovak Republic	1	Rural - Basic
		2	Urban - Basic
		3	Urban - Gymnasium
705	Slovenia	1	None
724	Spain	1	Public
		2	Private
752	Sweden	1	None
756	Switzerland	1	Basic Requirements
		2	Advanced Requirements
		3	High Requirements
		4	Other School Types
764	Thailand	1	Rural
		2	Urban

References

Schulz, W., Ainley, J. & Fraillon, J. (Eds.) (forthcoming). *ICCS 2009 Technical Report*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).

